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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/648,289 | 08/27/2003 | Takeshi Hoshino | ASA-1153 | 4457 |

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MATTINGLY, STANGER & MALUR, P.C.
ATTORNEYS AT LAW
SUITE 370
1800 DIAGONAL ROAD
ALEXANDRIA, VA 22314

| EXAMINER | |
|---|---|
| SHERMAN, STEPHEN G | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2629 | |

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/648,289 | HOSHINO ET AL. | |
| | Examiner | Art Unit | |
| | Stephen G. Sherman | 2629 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *14 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-6,8 and 9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1. This office action is in response to the amendment filed the 14 April 2006. Claims 1-6 and 8-9 are pending. Claim 7 is cancelled.

### *Response to Arguments*

2. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanajima et al. (US 2002/0008691) in view of Shahoian et al. (US 6,822,635).

***Regarding claim 1***, Hanajima et al. disclose a display unit (Figure 1) with touch panel including a touch panel disposed on a display screen of a display panel to detect touch position of a pointer (Figure 3), operation being conducted by touching a touch operation member displayed on the display screen (Figure 7), the display unit with touch panel comprising:

a sensor for sensing pushing pressure P caused by the pointer when touching the touch operation member (Page 3, paragraph [0033]. The examiner interprets that if the touch panel can detect a depressing pressure that it would have a sensor for doing so.); and

a control section (Page 3, paragraph [0037]. The examiner interprets that the comparing means performs the same function as the said control section since it determines what pressure has been applied to the touch panel.) for conducting first processing concerning the touch operation member pushed by the pointed when the pressure P sensed by said sensor satisfies a relation $P1 \leq P < P2$ with respect to previously set pressures P1 and P2 (where $P1 < P2$), and conducting second processing concerning the touch operation member pushed by the pointer when the pushing pressure has changed from $P1 \leq P < P2$ to $P2 \leq P$ (Page 3, paragraph [0048] and page 4, paragraph [0050]. The examiner interprets that when the weak pressure is applied that the highlight mode is conducted by a first processing means and that this pressure

would fall between a predetermined range. Also the examiner interprets that when the higher pressure is applied that the application that is executed would be performed by a second processing and that this higher pressure would be greater than a predetermined pressure.),

wherein when the pushing pressure P satisfies the relation P1≤P<P2, the display concerning said touch operation member is changed to be different by said first processing (Paragraph [0050] explains that when a weak pressure is used that a highlight mode is entered, i.e. a first processing is executed to highlight the icon.), and

when the pushing pressure has changed from P1≤P<P2 to P2≤P where the touch operation member is regarded as pressed a predetermined processing assigned to the touch operation member is executed by the second processing (Paragraph [0048] explains that when a high pressure is used that an icon is selected rather than highlighted, i.e. a second processing is executed to execute the program associated with the icon.).

Hanajima et al. fail to teach of a display unit with a touch panel wherein when the pushing pressure has changed from P1≤P<P2 to P2≤P where the touch operation member is regarded as pressed, a function of moving the display screen in a direction of pushing pressure caused by the pointer executed by the second processing.

Shahoian et al. disclose of moving a display screen in a direction of pushing pressure caused by a pointer (Column 34, lines 2-23 and Figure 18 explain that regions, i.e. icons, can be associated with haptic sensations which are executed when a user

selects an item, and the pulse created from this haptic feedback would move the display screen is a direction of the pushing pressure.).

Therefore it would have been obvious to "one of ordinary skill" in the art to combine the concept providing a user with a haptic feedback response taught by Shahoian et al. with the multiple touching pressure touch panel taught by Hanajima et al. such that when a pressure is applied to make a selection of an icon a tactile feedback would be given in order to assist and inform the user of interactions and events within a graphical user interface.

***Regarding claim 2***, Hanajima et al. and Shahoian et al. disclose the display unit with touch panel according to claim 1.

Shahoian et al. also disclose wherein in addition to processing of making display concerning the touch operation member different is conducted by the first processing, processing of moving the display screen a direction of pushing pressure caused by a pointer (Column 33, lines 28-36 explain that different regions, i.e. icons, on the display may be marked with border such that a user receives visual and/or tactile response depending on where the user is contacting the screen. This corresponds to a first processing step since the icon has not yet been selected, so that when used in combination with the Hanajima reference the highlight mode would also provide the user with a tactile feedback to aid in recognition of the touch with weak pressure. This tactile feedback would thus move the display screen in a direction of the pushing pressure, since the screen would vibrate.).

***Regarding claim 3***, Hanajima et al. and Shahoian et al. disclose the display unit with touch panel according claim 2.

Shahoian et al. also disclose wherein if the processing of executing the function of moving the display screen in a direction of pushing pressure caused by the pointer is conducted by a first function, then its travel quantity or a rate change of the travel quantity for an increase of the pushing pressure is different from that in the travel of the display screen conducted by a second function (Columns 33, lines 45-51 and column 34, lines 11-23 explain that the amount of pressure placed on the touchpad will cause a proportionate increase in the function being executed. Increasing the scrolling speed with increased pressure is the example used, but the examiner understands that this principle could also be applied to the pushing pressure.).

***Regarding claim 4***, Hanajima et al. and Shahoian et al. disclose the display unit to claim 2.

Shahoian et al. also discloses wherein the function of moving the display screen in a direction of pushing pressure caused by the pointer is conducted by a first function, and instead of the function of moving the display screen in a direction of pushing pressure caused by the pointer, a function of moving the display screen in a direction opposite that pushing pressure caused by the pointer is conducted by a second function (Referring to the rejection of claim 2, the examiner interprets that if a tactile feedback is given to the user as described within the Shahoian reference, the display screen would

be vibrated resulting in the movement of the display screen in both the directions of pushing pressure and the direction opposite of pushing pressure.).

***Regarding claim 5***, Hanajima et al. and Shahoian et al. disclose a display unit with touch panel according to claim 1.

Shahoian et al. also discloses a display unit further comprising:

a storage section for storing data that represent a relation between a position and a height as regards contents displayed on the display screen (Figure 4 and column 11, lines 41-47 explain that memory 122 stores instructions for the microprocessor 110.);

wherein said control section reads height data corresponding to coordinates of a detected touch position from said storage section, and conducting processing moving the display screen with a drive quantity depending upon the height data by the first processing (Figure 4 and column 11, lines 17-22 explain that the device contains a microprocessor 110 for controlling appropriate output actuator signals from stored instructions. Using the explanation given with respect to column 34, lines 2-23, the examiner interprets that the memory would stored the tactile feedback response that is to be supplied by the microprocessor to the actuator for creating the response to the user. Since the tactile feedback can be created with respect to the different positions on the screen, the memory would store the different feedback to be provided for the different sections on the display and supply the quantity of tactile response specified by

the area of the screen the user touches to the microprocessor in order to create the response.).

***Regarding claim 6***, Hanajima et al. and Shahoian et al. disclose a display unit according to claim 5.

Shahoian et al. also disclose wherein

the moving of the display screen by the first processing is processing of moving the display screen to a predetermined first height, when a transition is effected from a state in which the pointer touches an area where the touch operation member is not displayed to a state in which the pointer touches an area where the touch operation member is displayed (Column 33, lines 29-36 explain that a user may feel tactile feedback when an icon is touched for the user to recognize which region of the touchpad the user is contacting. Since column 34, lines 17-23 explain that tactile feedback can be given relative to the pushing pressure, this first tactile response would be predetermined.), and

the moving of the display screen by the second processing is processing of the display screen to a predetermined second height (Since column 34, lines 17-23 explain that tactile feedback can be given relative to the pushing pressure, the second pressure for selecting the icon would be predetermined.)

wherein said first height is relatively higher than a height of the display screen in an immediately preceding state, and said second height is relatively lower than a height of the display screen in an immediately preceding state (When the first pressure is

applied and a tactile response is made, the vibration would cause a height of the display screen to vibrate, meaning that the height at some point would reach a height relatively higher than in a preceding state. Then, when the second higher pressure is applied and a tactile response is made, the vibration would cause a height of the display screen to vibrate, meaning that the height would at some point reach a height relatively lower than in a preceding state.).

***Regarding claim 8***, please refer to the rejection of claim 1, and furthermore Shahoian also discloses:

a memory for storing audio data (Figure 4 and column 11, lines 41-47 explain that memory 122 stores instructions for the microprocessor 110.);

a speaker for reproducing the audio data (Figure 4, audio output device 104.);

wherein a voice message is generated from the speaker based on the audio data concerning the touch operation member read out from memory (Figure 4 and column 11, lines 17-22 explain that the device contains a microprocessor 110 for controlling appropriate output actuator signals from stored instructions. Using column 33, lines 29-36 the examiner understands that when a portion of the screen is touched, i.e. highlight mode in the combination of the references, that an audio signal is generated to tell the user which region has been touched. The audio response for these actions would need to be stored in memory for being able to be reproduced onto the audio output device.).

***Regarding claim 9***, please refer to the rejection of claim 8.

***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen G. Sherman whose telephone number is (571) 272-2941. The examiner can normally be reached on M-F, 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS

AMR A. AWAD
PRIMARY EXAMINER

4 May 2006